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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,607	12/11/2003	Robert W. Erickson	RCM 03324	8510

7590 06/07/2006
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EXAMINER

SINGH, SUNIL

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,607

Applicant(s)

ERICKSON, ROBERT W.

Examiner

Sunil Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12, 16, 18-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 calls for the at least one groove having a first predetermined size and the at least two grooves each having a second predetermined size which is larger than the first predetermined size; however, such subject matter was never disclosed in the originally filed disclosure. Page 7 of the specification makes a comparison between the "pins (8)" and "groove (2)" of the shank; however, there was no comparison between the "groove (2)" of the shank and the "grooves (16a,b;20a,b)" formed in the surface of the bore of the support block.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krekeler '637 in view of Krekeler '206.

Krekeler '637 discloses a retaining system (see Fig. 4) for securing a cutting tool to a support block, said retaining system comprising: at least one groove (22) having a first predetermined shape, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank; at least one groove (23) having a second predetermined shape, formed in a surface of a bore formed through an axis of said support block for receiving therein said shank portion of said cutting tool, said at least one groove formed in said outer surface of said shank portion of said cutting tool being substantially radially opposed to said at least one groove formed in said surface of said bore formed through said axis of said support block when said shank portion is inserted into said bore of said support block; and at least one rolled spring steel pin member (24) (see col. 4 lines 15-25) engageable with each of said at least one groove formed in said outer surface of said shank portion said cutting tool and said at least one groove formed in said surface of said bore formed through said axis. Krekeler '637 discloses the invention substantially as claimed. However, Krekeler '637 is silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify Krekeler '637 to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder.

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With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove.

5. Claims 1,6-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrow (US 3498677).

Morrow discloses the claimed invention except for at least two pins in the grooves. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Morrow to include at least two pins, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 10 of Morrow, wherein the vast majority of the pin (74) is within the bore's groove (73) which would make it larger than the shank's groove (83).

6. Claims 1,6-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102) in view of Krekeler '206.

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Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose a retaining system for securing a cutting tool to a support block. Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose the invention substantially as claimed. However, they are all silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify either Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Hansen et al., Fig. 24 of Krekeler '764, Fig. 3 of Kniff et al, Figs. 4-5 of Krekeler '359, Fig. 1 of Vasek, Fig. 2 of Stewart), wherein the vast majority of the pin(s) is within the bore's groove(s) which would make it larger than the shank's groove. OR

With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove. .

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7. Claims 1, 6-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102).

Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose the claimed invention except for at least two grooves and pins. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify either Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart to include at least two grooves and pins, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Hansen et al., Fig. 24 of Krekeler '764, Fig. 3 of Kniff et al, Figs. 4-5 of Krekeler '359, Fig. 1 of Vasek, Fig. 2 of Stewart), wherein the vast majority of the pin(s) is within the bore's groove(s) which would make it larger than the shank's groove.

8. Claims 1, 3-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268) in view of Krekeler '206
Bower, Jr. discloses the invention substantially as claimed (see Figures). However, Bower, Jr. is silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered

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obvious to one of ordinary skill in the art to modify Bower, Jr. to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Bower Jr., wherein the vast majority of the pin (6) is within the bore's groove (7) which would make it larger than the shank's groove. OR

With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove.

9. Claims 1, 3-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268).

Bower Jr. discloses the claimed invention except for at least two grooves and pins.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bower Jr. to include at least two grooves and pins, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1, wherein the vast majority of the pin (6) is within bore's groove (7) which would make it larger than the shank's groove.

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10. Claims 1, 2-12, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipo document (WO 00/34626) in view of Krekeler '206 (US 3622206).

Wipo '626 discloses the invention substantially as claimed (see Figure 16). However, Wipo '626 is silent about including a groove in the shank of the cutting tool and at least two pins for the grooves (46). Krekeler '206 teach a groove in the shank of a cutting tool (see col. 20 line 5+) and at least two pins for two grooves (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify Wipo '626 by including a groove in the tool's shank and at least two pins for the two grooves as taught by Krekeler '206 since this would facilitate insertion because the pin will contract to permit insertion and due to its resiliency property rebound to retain the cutting tool in its holder and more securely retain the tool within the holder.

With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove.

Response to Arguments

11. Applicant's arguments filed 3/3/06 have been fully considered but they are not persuasive. Applicant argues that Krekeler '206 teaches away from a rotatable tool. The examiner is not relying on Krekeler '206 for teaching of a rotatable tool. Applicant argues that none of the prior art teaches the limitation of the size of the shank's groove

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being smaller than the size of the bore's groove. The examiner disagrees. Such limitations are taught as follows:

With regards to Krekeler '206, the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) is within the bore grooves (77,78) which would make it larger than the shank's groove.

With regards to Morrow, the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 10 of Morrow, wherein the vast majority of the pin (74) is within the bore's groove (73) which would make it larger than the shank's groove (83).

With regards to Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart, the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Hansen et al., Fig. 24 of Krekeler '764, Fig. 3 of Kniff et al, Figs. 4-5 of Krekeler '359, Fig. 1 of Vasek, Fig. 2 of Stewart), wherein the vast majority of the pin(s) is within the bore's groove(s) which would make it larger than the shank's groove.

With regards to Bower, Jr., the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Bower Jr., wherein the vast majority of the pin (6) is within the bore's groove (7) which would make it larger than the shank's groove.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Engle Patricia can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sunil Singh
Primary Examiner
Art Unit 3673



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